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ABSTRACT

This report describes and evaluates the first year of Project Beacon, a bilingual program implemented at four high schools in Queens, New York, in 1985-86. Project Beacon provided instruction in English as a second language, in native language arts, in bilingual academic subjects, and in career-oriented subjects. It reached 570 Spanish-, Chinese-, and Korean-speaking students of limited English proficiency (LEP) in Grades 9 through 12. The project's basic goal was to help LEP students achieve proficiency in English, thereby preparing them to enter mainstream classes. Emphasis was placed on developing new curricula and instructional materials that would improve language skills. Overall, the project's instructional and non-instructional objectives were met. The schools' administrations were supportive; staff training was carried out as planned; the level of parental involvement was high; and a variety of instructional materials were created. Students tested well on English, native language, and subject exams, and the dropout rate of program students was lower than the mainstream dropout rate at all sites. This report includes recommendations for improvements, information on staff size and funding, quantitative student achievement data, and samples of letters sent to parents. (KH)

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PROJECT BEACON

1985-86

OEA Evaluation Report

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O.E.A. Evaluation Section Report

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Grant Number: G00-852-5031

PROJECT BEACON

1985-86

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A SUMMARY OF THE REPORT

Project Beacon, in its first year of a three-year funding cycle, provided instruction in English as a second language (E.S.L.); in native language arts; in bilingual math, science, and social studies; and in career-oriented subjects to 570 Spanish-, Chinese- and Korean-speaking students of limited English proficiency (LEP) in grades 9 through 12. In 1985-86, the program operated at four public school sites in Queens: a primary resource center at Newtown High School in Elmhurst; John Bowne High School in Flushing; Forest Hills High School; and Francis Lewis High School in Flushing.

The project's basic goal was to help LEP students achieve proficiency in English, thereby preparing them to enter mainstream classes. To help achieve this goal, Project Beacon emphasized the development of new curricula and instructional materials that would improve students' English- and native-language skills. Curricula were developed that integrated academic subjects (social studies, general science and global history) with E.S.L. classes, and that incorporated native history, culture, and language with academic and career-oriented classes (e.g., "Vision Global de la Cultura Hispanomericana"). A collection of excerpts from Chinese literature was also developed.

Title VII funds supported a curriculum development specialist, two resource specialists, four educational assistants, one secretary, and other administrative staff.

Overall, the project was successfully implemented: both instructional and non-instructional objectives were met; the school administrations were supportive; the project director and staff members worked hard to make the program a success; staff training was carried out as planned; the level of parental involvement was high; and a variety of instructional materials were created.

Program objectives were assessed in English language development (Criterion Referenced Syntax Test [CREST]); mastery of the native language for Spanish-speaking students (Interamerican Series, La Prueba de Lectura); mathematics, science and social studies (teacher-made tests); career subjects (teacher-made tests); and dropout rate (school and program records). Quantitative analysis of student achievement data indicates that:

-- Students tested with all levels of the CREST in both fall and spring exceeded the program objectives for mastering CREST skills.

-- Spanish-speaking students tested with La Prueba de Lectura made statistically significant gains, thus meeting the program objective.

-- Students met the program objective for achievement in content-area courses, with an overall passing rate of 76 percent.

-- In career subjects, the data provided indicate that the objective was achieved both semesters, with passing rates ranging from 86 percent to 92 percent.

-- The dropout rate of program students was lower than the mainstream dropout rate at all sites; thus the program objective was achieved.

The following conclusions and recommendations are offered by the evaluation team:

-- The project director encouraged the principal at Forest Hills High School to institute a Chinese language arts class. Its approval is currently under consideration. Continued encouragement is suggested in this regard.

-- The resource/curriculum specialists at Newtown might provide in-service training to teachers at all sites on instructional approaches, lesson planning, strategies for the integration of content into E.S.L. and classroom demonstrations.

-- There appears to be a need for a Spanish-speaking guidance counselor at Newtown. Although school counselors were available, the resource specialist served as a de facto bilingual counselor because students continually sought him out for advice. If resources permit, a counselor to serve the Hispanic population might be hired. Community resources might also be explored.

-- In the future, a more systematic method of recordkeeping should be established to track the progress of Project Beacon students. Information should be collected on dropouts, attendance, transfer to transitional and mainstream classes, and graduation. For comparability, record-keeping methods should be the same project-wide. This would provide a data base from which to assess how successfully the project is achieving its goals.

-- The project director and her staff at the central office at Newtown are very overcrowded. If resources permit, additional space should be allocated to the project.

-- Given the diverse Asian and Hispanic origins of Project Beacon students, the project director might conduct a seminar for teachers on intra-ethnic differences and how these affect students' behavior and perceptions.

ACKNOWLEDGEMENTS

The production of this report, as of all Office of Educational Assessment/Bilingual Education Evaluation Unit reports, is the result of a cooperative effort of regular staff and consultants. In addition to those whose names appear on the cover, Eulalia Cabrera has interpreted findings and has integrated material into reports. Arthur Lopatin has edited the reports following the O.E.A. style guide and has written report summaries. Finally, Joseph Rivera, Marcia Gilbert, Bruce Roach, Gladys Rosa, and Martin Zurla have worked intensively as word processors to produce and correct reports. Without their able and faithful participation, the unit could not have handled such a large volume of work and still produced quality evaluation reports.

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PROJECT BEACON

Central Office:	Newtown High School 48-01, 90th Street Elmhurst, New York 11373
Other Participating Sites:	John Bowne High School 63-25 Main Street Flushing, New York 11367 Forest Hills High School 67-10 110th Street Forest Hills, Queens 11375 Francis Lewis High School 58-20 Utopia Parkway Flushing, Queens 11365 Martin Luther High School 60-02 Maspeth Avenue Maspeth, Queens 11375
Year of Operation:	1985-86, first year of three-year funding cycle
Target Languages:	Spanish, Chinese, Korean
Number of Students:	672
Project Director:	Dr. Margaret T. Pan-Loo

I. DESCRIPTION

OVERVIEW

Project Beacon, in its first year of a three-year Title VII funding cycle, operates at four public high schools in Queens. In addition, it will serve a private high school in Queens in future years. The project proposed serving 600 limited English proficient (LEP) students at the following sites:

Newtown - 250 Hispanic students
John Bowne - 200 Hispanic students

Francis Lewis - 70 Chinese/Korean students
Forest Hills - 50 Chinese/Korean students
*Martin Luther (private) - 30 Hispanic/Chinese/Korean students

Newtown High School has long been committed to bilingual education and has accommodated its various ethnic populations with intensive English as a second language (E.S.L.) classes and native-language instruction in Spanish, Chinese, and Korean. Almost 35 percent of the student enrollment at John Bowne is Hispanic, and the school offered both E.S.L. and bilingual Spanish classes. Forest Hills has had a continuous increase in newly-arrived Chinese and Korean students and has established a program of E.S.L. and content-area remedial instruction. Francis Lewis is a multi-ethnic school whose student body is 13 percent Asian, many of them recent immigrants in need of language assistance. This was the first time that the latter two sites had received Title VII assistance to augment their services to LEP students.

The main emphasis of Project Beacon is the promotion of bilingual fluency among newly-arrived ninth- through twelfth-grade students. Bilingual academic and career education are additional components of the project. Project Beacon's goals are for students to develop the linguistic and other competencies they need to participate in their high schools' career-education programs; to meet the requirements for high school graduation; and to successfully enter the world of work.

The project is implementing its goals through the following:

1. the integration of topics, themes, and concepts from content-area courses with E.S.L. classes;

2. teaching native-language reading and writing skills;

*An evaluation of this school's program is not included in this report. Data were not available for this site.

3. using native languages in math, science, and social studies classes;

4. making native-language assistance available in career and pre-occupational skills classes;

5. integrating study of the LEP students' ethnic heritages with content-area and career classes;

6. using the "mastery-learning" technique in E.S.L. and content-area classes;

7. offering "career-awareness workshops"; and

8. informing students about career options.

ORGANIZATION

During the 1985-86 year, Project Beacon had nine staff members: the project director/coordinator, a curriculum development specialist, and a secretary (all located at Newtown); two resource specialists (one at Newtown and one at John Bowne); and four educational assistants (one at each public school site). (Appendix A presents the characteristics of the project staff.) In addition, the project received the services of 56 staff members supported by other funding sources at the four schools. (See Table 1.)

The director oversaw project staff members and was the liaison with the E.S.L. and bilingual content-area teachers. The assistant principals (A.P.s) for different content-areas supervised their respective bilingual teachers; the A.P. of foreign languages supervised the Spanish, Chinese, and Korean teachers; the A.P. of E.S.L. supervised the E.S.L. teachers. (See Figure 1.)

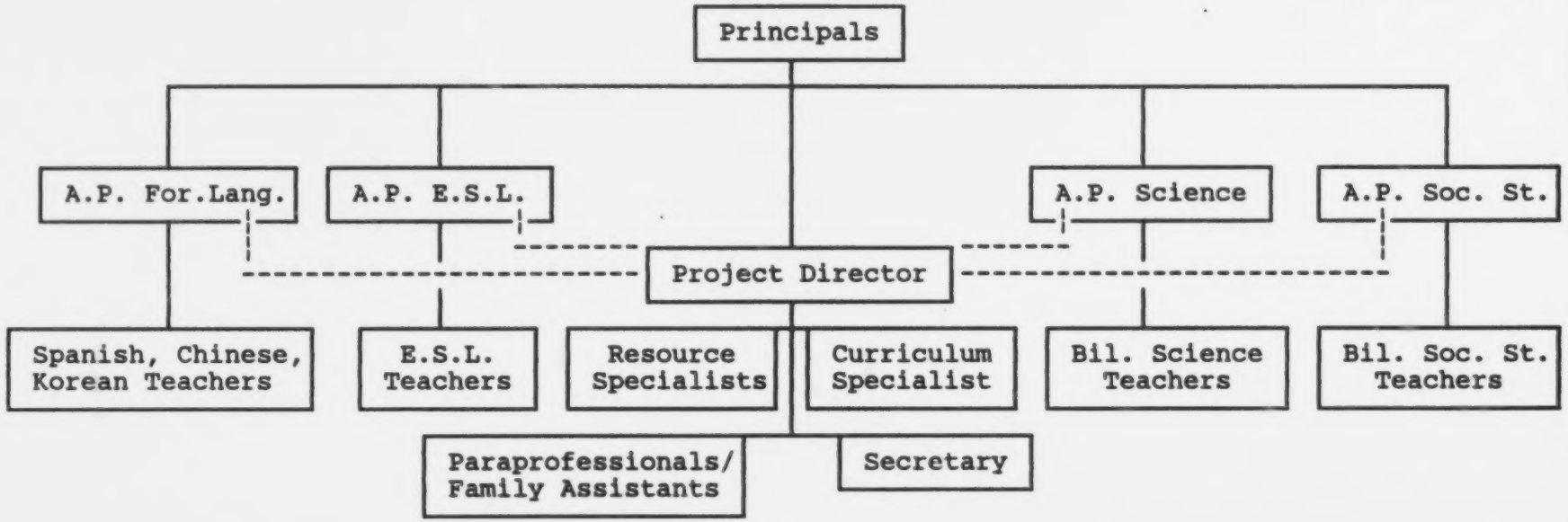
TABLE 1

Number of Non-Title VII Staff Providing Services at Each Site

Subject Area	Newtown	J. Bowne	Francis Lewis	Forest Hills
English as a second language	10	7	2	3
Reading (English)	0	0	1	2
Native language arts	9	2	1	0
Bilingual math	2	2	0	1
Bilingual science	2	1	0	0
Bilingual social studies	1	1	0	0
Administrative	0	1	0	0
Supportive services	0	6	0	1

FIGURE 1

ORGANIZATION OF PROJECT BEACON:
GENERAL MODEL FOR EACH SITE



_____ Supervision

----- Collaboration

The project director's responsibilities included coordinating and overseeing activities at all four sites. She was in contact with each school principal and with staff members in charge of classes and other project activities. She also conducted orientation and training workshops at Newtown for staff and teachers. The majority of her time was spent at Newtown and John Bowne, with visits made to the other two sites at least once a week.

The resource specialist at John Bowne assisted the bilingual teachers and worked with the students on counseling, testing, and tutoring. He also provided career-awareness training and college advisement. The family assistant at John Bowne counseled and programmed students, performed administrative work, and contacted parents about students' absences and grades. She oversaw a twice-weekly after-school tutorial program, in which English-proficient students assisted LEP students. Most important, she visited homes of parents who could not be reached by phone regarding their children's absences and poor grades. She believes these visits were effective in improving attendance and grades.

The resource specialist at Newtown developed curricula and counseled students whenever necessary. The curriculum specialist oversaw the development of the new instructional materials that were developed to integrate science, social studies, and history with the E.S.L. courses.

The educational assistant at Forest Hills was fluent in Cantonese and Mandarin. He was considered a role model by the Chinese-speaking students. His responsibilities included assisting teachers in bilingual tutoring and classroom teaching; interpreting for guidance counselors; and, especially, assisting in the school's tax-levy-funded bilingual math lab for Chinese-

speaking LEP students. He also helped develop special materials for these students.

II. STUDENT CHARACTERISTICS

The project reported data for the 672 students who were served during the academic year: 299 at Newtown, 215 at John Bowne, 86 at Francis Lewis, and 72 at Forest Hills. (See Table 2.) No data were reported for students at Martin Luther.

The 672 students served in the 1985-86 school year were of limited English proficiency, and were either refugees or newly-arrived immigrants to the United States. According to the project director, none of these students had ever been served by a Title VII program.

School staff members stated that students' varied cultural, economic, educational, and family backgrounds had significantly affected their educational needs. For example, Chinese children from Hong Kong, Taiwan, and Vietnam generally needed basic skills instruction in lettering, whereas Korean students did not. Many of the children came from low-income families. Almost 95 percent of the LEP students qualified for the free-lunch program and many held part-time jobs to augment family incomes. Cultural variations among and between Asian and Hispanic students affected their overall academic orientation and the way they coordinated schoolwork with home life. (The project director was aware that the staff development program should include information on this topic. A discussion of how students' particular cultural backgrounds influence their attitudes and behaviors was incorporated into one workshop for teachers this year. She hopes that in the future additional seminars will increase teachers' cultural understanding, and thereby enhance their ability to respond to

TABLE 2

Number of Project Students by Native Language and School

Native Language	Number of Students*			
	Newtown	John Bowne	Francis Lewis	Forest Hills
Spanish	270	205	1	0
Chinese (Mandarin and Cantonese)	0	0	61	36
Other Chinese Dialect	0	0	0	1
Korean	0	0	19	28
Other Asian	0	0	0	3
TOTAL	270	205	81	68

*Data for 48 cases were missing.

- The Hispanic students composed the largest project component (76 percent).
- The Chinese and Korean students composed the second largest group (23 percent).

children's specific backgrounds, instead of responding to them simply as Asians or Hispanics.)

John Bowne's enrollment included students from 70 countries. Most of its LEP students were from China, Hong Kong, India, Korea, Jamaica, the Philippines, Taiwan, Vietnam, and the Caribbean, as well as from Central and South America. John Bowne's Hispanic enrollment included students from the Dominican Republic, Colombia, Ecuador, El Salvador, Guatemala, and Puerto Rico. Contrastingly, most of Newtown's LEP students were from the Dominican Republic. Both John Bowne and Newtown students participated in another Title VII project intended especially for Asian students, Project PAN.

Tables 3 and 4 present Project Beacon students by sex and grade and by age and grade, respectively. Table 5 presents the amount of time students have been enrolled in Project Beacon.

TABLE 3

Project Students by Sex, School, and Grade

	Newtown*		John Bowne**		Francis Lewis		Forest Hills***		All Students		
Grade	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	TOTAL
9	77	64	52	54	11	9	8	7	148	134	282
10	70	84	40	40	9	14	16	16	135	154	289
11	1	1	10	14	7	23	12	7	30	45	75
12	0	0	1	0	4	4	3	1	8	5	13
TOTAL	148	149	103	108	31	50	39	31	173	189	659
Percent by sex	50	50	49	51	38	62	56	44	48	52	--

*Data were missing for two students.
**Data were missing for four students.
***Data were missing for two students.

- Overall, the number of male and female students were equally distributed; at only one site (Francis Lewis) were there significantly more female than male students.
- The number of students decreased in grades eleven and twelve.

TABLE 4

Number of Program Students by Age and Grade

Age	Grade 9	Grade 10	Grade 11	Grade 12	Total
All Students[a]					
14	[redacted]	7	0	0	62
15	[redacted]	[redacted]	4	1	158
16	58	[redacted]	[redacted]	0	162
17	30	71	[redacted]	[redacted]	128
18	15	54	21	[redacted]	96
19	9	13	12	2	36
20	2	2	0	1	5
21	0	1	1	1	3
TOTAL	278	284	75	13	650
Overage Program Students					
Number	114	141	34	4	293
Percent	41	50	45	31	45
Newtown High School					
Number	43	82	2	--	127
Percent	31	54	100	--	43
John Bowne High School					
Number	61	39	11	--	111
Percent	56	49	48	--	53
Francis Lewis High School					
Number	6	6	15	3	30
Percent	35	30	48	38	39
Forest Hills High School					
Number	4	16	6	1	27
Percent	27	48	32	25	38

[a] Twenty-two missing observations: seven missing at Newtown; four missing at John Bowne; ten missing at Francis Lewis; and one missing at Forest Hills.

- Forty-five percent of the program students are overage for their grade.
- The tenth grade has the greatest number and proportion (50 percent) of overage students.
- The proportion of overage students ranges from 38 percent at Forest Hills to 53 percent at John Bowne.

TABLE 5

Time Spent in the Bilingual Program
(As of June 1986)

Time Spent in Bilingual Program	Number of Students[a] Grade 9	Grade 10	Grade 11	Grade 12	Total
<1 Academic Year	165	173	9	--	347
1 Academic Year	114	106	52	9	281
2 Academic Years[b]	3	4	5	--	12
3 Academic Years[b]	--	--	--	3	3
4 Academic Years[b]	--	--	1	1	2
	282	283	67	13	645

[a] Data were missing for 18 students.

[b] Reflects probable participation in other bilingual program.

- The majority of program students (347, or 54 percent) have been in the program less than one year.
- Two hundred eighty-one students (44 percent) have been in the program for one year.

III. INSTRUCTIONAL COMPONENT

ENGLISH AS A SECOND LANGUAGE

Program Objective and Offerings

-- At the end of each school year, students will significantly improve their achievement scores in English language skills as measured by school-wide examinations and the Criterion Referenced English Syntax Test (CREST). It is anticipated that Level 1 and Level 2 students will master one instructional objective per month of program treatment, and that Level 3 students will master .5 objectives per month.

E.S.L. classes were given daily to LEP students in all four schools. Different levels were offered to suit students' differing achievement levels (see Table 6 for a sample of the offerings).

Of the two E.S.L. classes that were observed by the evaluation team, the one at Newtown contained exclusively Hispanic students and the one at John Bowne had students of Hispanic-, Chinese-, Arabic-, and Bengali-speaking origins. The Bowne teacher believed that such mixed-group classes encourage students to learn English faster, since they cannot communicate with each other except in the language they all are learning -- English. The students appeared comfortable with each other and showed a high level of classroom participation.

TABLE 6

Offerings in English as a Second Language

School	Course
Newtown	E.S.L. Levels 1 through 5 E.S.L. Typing Speech For Foreign Students
John Bowne	E.S.L. Levels 1 through 5 E.S.L. Health Instruction E.S.L. Keyboarding E.S.L. Horticulture
Francis Lewis	E.S.L. Levels 1 through 5
Forest Hills	E.S.L. Levels 1 through 5

Student Achievement in E.S.L.

The assessment instrument used to evaluate this objective was the Criterion Referenced English Syntax Test* (CREST). The CREST was developed by the New York City Public Schools to measure mastery of the syntactical skills presented in the E.S.L. curriculum. The CREST uses four items to measure each skill, and mastery is achieved when three of the four items are answered correctly. The test has three levels: beginning (1), intermediate (2), and advanced (3). Levels 1 and 2 each measure mastery of 25 skills, while Level 3 measures mastery of 15 skills.

The CREST was administered at the beginning of each semester. A mastery score to indicate gains was computed for each student by

* Extensive information on CREST syntax skills and psychometric properties are in the Technical Manual, New York City English as a Second Language Criterion Referenced English Syntax Test. (Board of Education of the City of New York, Division of High Schools, 110 Livingston Street, Brooklyn, NY 11201.)

calculating the difference between pretest and posttest. The number of months of instruction between testings was computed for each student by multiplying the number of months between testings by the student's attendance rate. The number of skills mastered per month was calculated by dividing the mean mastery by the mean number of months of instruction between testings.

Table 7 presents the test results for students who were pretested and posttested with the same level. Of the students who were reported to be taking E.S.L. classes (levels 1, 2, and 3), complete data (levels, pretest score, and posttest score) were available for 84 percent in the fall and 89 in the spring.

Examination of Table 7 reveals that the program objective was achieved by students at all levels both semesters. (Appendix A shows results of the CREST at each site.) Students at John Bowne and Newtown met the objective both semesters. The objective was met at Forest Hills in the fall by students tested at levels 2 and 3. At Francis Lewis, the objective was met only in the fall by students tested at level 3.

Students tested at level 3 had lower performance rates than those tested at lower levels. This was anticipated, partly because fewer skills are tested and partly because mastery of objectives takes longer at that level.

TABLE 7

Results of the Criterion Referenced English Syntax Test

Test Level	Number of Students	PRETEST Mean	PRETEST S.D.	POSTTEST Mean	POSTTEST S.D.	MASTERY* Mean	MASTERY* S.D.	Mean Mastery Per Month
				FALL				
1	199	8.7	7.0	13.7	7.2	5.0	5.0	1.5
2	215	11.8	7.0	15.5	6.6	3.7	4.8	1.0
3	44	10.2	3.6	12.3	2.9	2.1	2.2	0.7
TOTAL	458	10.4	6.9	14.5	6.7	4.1	4.7	1.2
				SPRING				
1	173	10.7	6.9	14.4	7.1	3.7	4.6	1.3
2	237	14.2	6.4	17.3	6.0	3.1	4.4	1.1
3	94	10.4	2.9	12.2	2.3	1.7	1.8	0.6
TOTAL	504	12.3	6.3	15.4	6.2	3.0	4.2	1.1

*Posttest minus pretest.

- The program objective was met both semesters by students tested at all levels.

NATIVE LANGUAGE ARTS

Program Objective and Offerings

-- As a result of participating in the program, and by the end of the 1985-86 school term, Hispanic, Chinese, and Korean students will show a significant increase in native language achievement.

Native language arts courses were offered at all sites. (See Table 8.) However, the resource specialist reported that they could not offer Korean instruction during the first year of the project because it was difficult to identify staff who were qualified. However, the project was organizing Korean classes at Francis Lewis and Forest Hills to begin in the fall of 1986.

TABLE 8

Instruction in Native Language Arts

School	Language	Course
Newtown	Spanish	Levels 5-9 Advanced Placement
John Bowne	Spanish	Levels 5-9 Advanced Placement
Francis Lewis	Chinese	Levels 1 and 2
Forest Hills	Chinese	Levels 1 and 2

Student Achievement in Native Language Arts

The program objective called for an increase in raw score from pre- to posttest, statistically significant at the .05 level. The program used a standardized test to measure Spanish native language achievement. The test used, La Prueba de Lectura, Level 3, Form A, is part of the Interamerican

Series of Tests published by the Guidance Testing Associates and is used to measure gains in Spanish reading. The test items for the series are selected for cultural relevance to Hispanic cultures in the Americas.

The Prueba de Lectura was administered in the fall and spring. Complete data (pretest and posttest) were available for 272 Hispanic program students. Because the publishers recommend developing local norms and programs do out-of-level testing, analysis was based on raw score gains, rather than on standard score gains. The results are presented in Table 9.

Statistical significance of the mean gain was determined through the correlated t-test model to demonstrate whether the mean gain is larger than would be expected by chance variation alone. Because statistical significance does not provide enough descriptive information, the table also includes the proportion of students making gains.

Examination of Table 9 reveals that the program objective was achieved for Hispanic students -- Spanish-speaking students made, on the average, a significant gain of 13.0. Fifty-six percent of the students improved their scores, while 44 percent made no improvement.

The objective of improvement in the native language could not be evaluated for other language groups because the data necessary were not available. However, the passing rates for students enrolled in native language arts classes were available for Hispanic and Chinese students; no data were available for Koreans. For Cantonese and Mandarin speakers, grades were available for only nine students in the spring semester, all of whom successfully completed their classes.

Among Spanish-speaking students, 79.6 percent in the fall and 86.2 percent in the spring obtained a grade of 65 percent or better. Appendix B shows that the passing rates in native language arts courses were unusually high in each school.

TABLE 9

Results of La Prueba de Lectura, Level 3

Number of Students	PRETEST Mean	PRETEST S.D.	POSTTEST Mean	POSTTEST S.D.	GAIN Mean	GAIN S.D.	Percentage of Students Making Gains
272	72.3	22.4	85.3	21.4	13.0*	18.2	56

*statistically significant at the .05 level

- Spanish-speaking students met the program objective of making a significant improvement in native language.

CONTENT-AREA COURSES

Program Objective and Offerings

-- At the end of each school term, 70 percent of the target students will achieve a passing grade of at least 65 percent in mathematics, science, and social studies.

Data on bilingual content-area offerings were available for Newtown, John Bowne, and Forest Hills. Bilingual classes were offered in mathematics, science, and social studies. (See Table 10.) One of Project Beacon's basic strategies is to use native languages in content areas to buttress self-esteem and enhance native-language ability, while at the same time steadily increasing the amount of English used. A member of the evaluation team observed content-area courses at both Newtown and John Bowne and found that teachers had succeeded in integrating English into their courses in reasonable and systematic ways. The following are percentages of the time that observed classes were taught in English: global history, 14 percent; ninth-grade algebra, 23 percent; and biology, 35 percent.

TABLE 10

Bilingual Content-Area Courses

School	Course	Languages of Instruction
Newtown	Math Fundamentals I, II Remedial Math I, II Computer Math I Biology I, II General Science I, II Global History I, II American History I, II	Spanish/English
John Bowne	Fundamental Math I, II Remedial Math I, II Sequential Math I, II Computer Math I Biology I, II, III General Science I, II, III Life Science I Global History I, II, III American History I, II, III	Spanish/English
Forest Hills	Math Lab	Chinese/English

Student Achievement in Content-Area Courses

Achievement data were available only for students at Newtown and John Bowne (see Table 11). On the basis of the data provided, students achieved an overall passing rate of 75 percent in the fall and 76 percent in the spring, thus meeting the program objective. However, when examined by subject, the program achieved its objective in science and social studies, but not in math. Overall, 80 percent of the program students enrolled in science classes and 83 percent of those enrolled in social studies classes obtained a grade of 65 percent or better. However, only 64 percent of the students enrolled in math classes achieved a grade of 65 percent or better.

Appendix C shows the passing rates in content-area courses for students at John Bowne and Newtown. A comparison of the data reveals that students at John Bowne achieved higher passing rates than students at Newtown in all subjects. Moreover, in the spring semester, program students at John Bowne achieved the proposed objective in the three content areas.

TABLE 11

Passing Rates for Program Students in Content-Area Courses

	FALL		SPRING		Total
Content Area	Number of Students	Percent Passing	Number of Students	Percent Passing	Percent Passing
Math	385	64	380	65	64
Science	385	78	364	83	80
Social Studies	388	84	340	82	83
TOTAL		75		76	76

- Overall, the passing rate for content-area courses was above 70 percent both semesters; thus, the program objective was achieved.

CAREER SUBJECTS

Program Objective and Offerings

-- At the end of each school term, 70 percent of the students participating in career courses or activities will improve their knowledge of careers by either:

1. passing teacher-made tests in instructional units relative to the above areas; or

2. achieving a satisfactory rating in the mastery of job-related activities, such as interview skills, writing a resume, designing an ornamental flower arrangement, etc.

Typing classes were the main career offerings at Newtown and John Bowne. Materials for these classes were developed in both Chinese and Korean by the bilingual curriculum/resource specialist and the educational assistant. Printing and mechanical-drawing classes were also offered to project students.

Student Achievement in Career Subjects

Passing rates for program students were reported for typing, computer literacy, and other career-related courses. Of the students who took typing, 92 percent passed in the fall and 86 percent passed in the spring. Only five students were enrolled in computer literacy in the fall, and all of them passed.

Other career courses reported fall and spring passing rates ranging from 92 percent to 100 percent, with the single exception of metal shop, in which only one of the three students who took the course passed. Thus, based on the available data, the objective was achieved.

IV. NON-INSTRUCTIONAL COMPONENT

CURRICULUM DEVELOPMENT

Program Objective and Products

-- At the end of the 1985-86 school year, at least one curriculum unit will be developed in each of the following areas: exploring careers, job survival skills, a bilingual math, science, or social studies curriculum guide/workbook, and a bilingual pre-occupational curriculum guide/workbook.

Project Beacon emphasizes the development of instructional materials and new curricula to improve students' English- and native-language skills. It also provides students with pre-occupational classes and career and college guidance. Curricular materials developed during the first project year integrated academic subject matter with E.S.L. classes and incorporated native histories and cultures with substantive academic and career-oriented classes.

E.S.L. sourcebooks have been developed in social studies, general science, and global history, thereby enabling project staff members to teach subject matter simultaneously with E.S.L. This supplemented and reinforced the academic subject matter that was presented in native-language content-area classes.

This novel approach made it possible for students to learn language in a meaningful context rather than in isolation. For example, the general science material in E.S.L. consisted of 14 lessons developed by an E.S.L. teacher and a content-area teacher. The lessons include topics in physics (light and sound), in chemistry (matter and metals), in biology (digestion, respiration, and circulation), and in earth science (the solar system and space travel). Visual aids and demonstrations accompany each lesson.

Sentence structure and patterns were tailored to the average E.S.L. student in Levels 2 and 3. Vocabulary words were selected according to appropriate English levels. The lessons include questions that the staff believes will promote critical thinking. (A copy of one lesson is offered in Appendix C.)

The staff believes that these sourcebooks challenge the students to develop their content-area knowledge while at the same time teaching and reinforcing English-language skills. Because this approach demonstrates respect for the intelligence, previous life experiences, and ages of the students, it provides a challenging way of learning English. The materials will be pilot-tested in E.S.L. classes in the coming year. They will then be reevaluated and their content enriched or modified before being put into general use.

The project has encouraged E.S.L. and content-area teachers to work together closely to upgrade English-language education. One E.S.L. teacher stated that this gave her an opportunity to exchange experiences and ideas about teaching bilingual students and to think differently about her own field, about her collaborators' fields, and about the special learning problems that arise in different subject areas.

In an effort to integrate native history and culture with academic classes, the Newtown resource teacher developed a 50-page text, "Vision Global De La Cultura Hispanomericana," which presents a broad overview of the cultural, economic, social, and linguistic development of Hispanic-American history. It includes an examination of both indigenous populations and the consequences of the Spanish conquest. The text is scheduled for pilot-testing in the coming year. Selections of Chinese literature were also developed and await pilot-testing. After these

curricula have been officially accepted, the resource teachers will help E.S.L. teachers develop ways to integrate them with their classes.

Finally, at John Bowne High School (a designated agricultural school), a course in plant science was offered to program students. The resource teacher adapted the text used in mainstream classes and provided the students with translations of the technical chapters. Thirty students enrolled, and all had perfect attendance records. In conjunction with the course, the class went on a field trip to Longwood Farms in Pennsylvania. The staff considered this course to be very successful because it allowed students to participate in the school's area of specialization.

While the project could not complete all the curriculum development proposed during its first year, curricula for other subject areas and for career classes will be prepared during the project's future years.

STAFF DEVELOPMENT

Program Objective and Activities

-- By the end of the 1985-86 school year 80 percent of the staff will have participated in staff development activities, in-service training, or workshops offered by the program; 50 percent will have completed a minimum of 6 credits in related college/university courses or have attained a Master's Degree in a related discipline; and 70 percent will have attended at least one local, regional, or national conference, meeting, or workshop dealing with bilingual, career, or E.S.L. education.

Workshops, meetings, seminars with the resource specialists, and other types of staff training took place at all sites. For example, John Bowne held discussions involving management, motivation, and discipline. Pre- and in-service training took place twice a year for all staff members. Faculty conferences and departmental meetings occurred monthly. Weekly workshops for beginning teachers were given by the resource specialist and

the A.P.s. Outside the schools, 20 staff members attended the Chinese Heritage and Culture Workshop, and a resource specialist attended the "Treasure of Spanish Books" symposium at the New York Public Library. In addition, five staff members took credit- bearing university courses during the year.

PARENTAL INVOLVEMENT

Program Objective and Activities

-- At the end of the 1985-86 school year, at least 100 parents of LEP students will have participated in the parents' E.S.L. training classes offered by the program; and at least 300 parents will have participated with their children in program and school meetings and functions, and in cultural enrichment events.

The project has succeeded in involving parents in the program. The Parent's Advisory Council at Newtown met each semester to discuss bilingual education and the program's supportive services; career nights were held at Newtown and John Bowne, with 140 parents attending.

At Forest Hills there was a well-attended International Foods Festival, and two informational meetings. The principal at Forest Hills believed that the Asian parents were very supportive of Project Beacon. He stated that no parent had transferred a child out of the project at his site.

E.S.L. classes for parents were given at Newtown, John Bowne, and Forest Hills. At the first two schools, three classes per week were given, with 75 and 85 parents attending at each school, respectively.

Finally, Project Beacon co-sponsored a Citywide Chinese Parents Conference. Bilingual education and career opportunities were among the topics discussed (see Appendix D).

DROPOUT RATE

-- As a result of participation in the program, and by the end of the 1985-86 school year, the dropout rate for the program students will be equal to or less than that of mainstream students.

Program staff members reported that dropout rates were lower for Beacon students than for mainstream students at each school.

John Bowne and Forest Hills reported no dropouts from the Beacon program. The dropout rate for Beacon students at Francis Lewis was 7 percent, 1 percentage point below the schoolwide dropout rate of 8 percent. The dropout rate for Beacon students at Newtown was 8 percent, 1.1 percent below the schoolwide dropout rate. The objective was thus achieved.

CAREER AWARENESS

Career awareness and college advisement were important aspects of the project. Throughout the year, the resource specialist at John Bowne offered workshops that included the use of filmstrips and movies about different careers. The specialist also organized a Health Careers Program, at which specialists in such fields as pharmacy and optometry spoke about their professions. The horticulture class provided information on careers in plant science. The resource specialist at Newtown offered information and advice to teachers on incorporating career information into their classes. Finally, John Bowne held a well-attended Hispanic Career Night for students and parents.

MICRO SUMMER PROGRAM

A number of small classes and tutorials for LEP students interested in improving their English skills were offered at Newtown during July and August of 1985. This program will be repeated during the summer of 1986.

V. CONCLUSIONS AND RECOMMENDATIONS

Project Beacon is a developmental, rather than remedial bilingual program. It has been successful in developing curricula for E.S.L. in several content areas. In addition, a concise history of Hispanic America (pre- and post-Conquest) was written and will be tested for general use in Spanish native-language courses. Students at John Bowne were offered an opportunity to enroll in plant science career courses that adapted the existing curriculum to their level of English knowledge; in addition, complex technical information was translated into the students' native languages. In the future, materials will be developed for Korean language arts.

The project director encourages the principal of each site to offer courses according to the project model. At Forest Hills High School, she encouraged the principal to institute a Chinese language arts class. Its approval was being considered.

The resource/curriculum specialists at Newtown were planning to provide additional in-service teacher training on instructional methods, lesson planning, strategies for integrating subject areas with E.S.L., and classroom demonstrations at all sites.

There appeared to be a need for a guidance counselor at Newtown. Although school counselors were available, the resource specialist had been serving as bilingual counselor by virtue of the fact that students came to him in search of advice. This problem was recognized by the principal. (The original program proposal called for a bilingual guidance counselor but it was not approved to be included in the negotiated budget.)

Although the project maintains extensive documentation of its activities, a more systematic method of record-keeping should be established to trace the progress of the project. Information should be collected on offerings at all sites, dropouts, attendance, transfer to transitional and mainstream classes, and graduation. For comparability, record-keeping methods should be the same at each site. This would provide a statistical base from which to gauge success in realizing the project's basic goals.

The project staff worked in terribly overcrowded conditions. This is particularly so in the case of the central office staff at Newtown.

Because project students came from several distinct Hispanic and Asian cultures, the project director might establish a special seminar to give the teachers an overview of the ways in which particular ethnic backgrounds affect students' perceptions and behavior.

VI. APPENDICES

APPENDIX A

Results of the Criterion Referenced English Syntax Test at John Bowne

Test Level	Number of Students	PRETEST Mean	PRETEST S.D.	POSTTEST Mean	POSTTEST S.D.	MASTERY* Mean	MASTERY* S.D.	Mean Mastery Per Month
				FALL				
1	101	8.4	6.5	14.7	7.1	6.3	5.0	2.1
2	72	13.1	6.3	17.6	6.0	4.5	3.7	1.5
3	22	8.9	3.8	11.2	2.9	2.3	2.4	0.8
TOTAL	195	10.2	6.5	15.4	6.6	5.2	4.5	1.7
				SPRING				
1	45	10.4	5.6	14.7	6.7	4.3	2.9	1.4
2	84	12.9	6.1	17.3	5.3	4.4	3.1	1.5
3	45	9.9	3.0	11.7	2.4	1.8	2.0	0.7
TOTAL	174	11.4	5.5	15.2	5.6	3.8	3.0	1.3

*Posttest minus pretest.

APPENDIX A (continued)

Results of the Criterion Referenced English Syntax Test at Forest Hills

Test Level	Number of Students	PRETEST Mean	PRETEST S.D.	POSTTEST Mean	POSTTEST S.D.	MASTERY* Mean	MASTERY* S.D.	Mean Mastery Per Month
				FALL				
1	12	13.8	6.3	15.4	6.9	1.6	1.0	0.5
2	13	10.1	6.4	13.6	7.1	3.5	2.7	1.2
3	8	10.2	7.3	11.7	3.2	1.5	1.3	0.5
TOTAL	33	11.5	3.6	13.8	6.3	2.3	2.1	0.8
				SPRING				
1	9	15.8	7.4	16.2	8.1	0.4	9.6	0.1
2	15	12.3	3.2	13.2	7.8	0.9	6.3	0.3
3	20	9.9	2.8	12.2	2.0	2.3	1.5	0.8
TOTAL	44	11.9	4.7	13.4	6.0	1.5	5.6	0.4

*Posttest minus pretest.

APPENDIX A (continued)

Results of the Criterion Referenced English Syntax Test at Newtown

Test Level	Number of Students	PRETEST Mean	PRETEST S.D.	POSTTEST Mean	POSTTEST S.D.	MASTERY* Mean	MASTERY* S.D.	Mean Mastery Per Month
				FALL				
1	69	6.2	5.7	10.5	6.4	4.3	5.1	1.0
2	110	10.4	7.1	13.8	6.4	3.4	5.7	0.8
TOTAL	179	8.8	6.9	12.5	6.6	3.7	5.5	0.9
				SPRING				
1	111	9.9	7.0	13.7	7.2	3.8	4.7	1.4
2	116	14.1	6.5	16.9	6.1	2.8	5.0	2.3
3	4	9.5	3.4	12.5	3.1	3.0	1.4	1.0
TOTAL	231	12.0	7.0	15.3	6.8	3.3	4.8	1.2

*Posttest minus pretest.

APPENDIX A (continued)

Results of the Criterion Referenced English Syntax Test at Francis Lewis

Test Level	Number of Students	PRETEST Mean	PRETEST S.D.	POSTTEST Mean	POSTTEST S.D.	MASTERY* Mean	MASTERY* S.D.	Mean Mastery Per Month
				FALL				
1	17	17.8	6.2	20.2	5.1	2.4	3.3	0.7
2	20	16.6	6.1	19.1	5.9	2.5	2.5	0.8
3	14	12.1	2.5	14.4	1.0	2.3	2.4	0.6
TOTAL	51	15.8	5.8	18.2	5.2	2.4	2.7	0.7
				SPRING				
1	8	17.4	6.1	19.1	4.5	1.7	2.0	0.6
2	22	21.0	3.5	22.3	3.3	1.3	1.9	0.5
3	25	11.9	2.0	12.9	2.1	1.0	1.6	0.4
TOTAL	55	16.3	5.4	17.5	5.3	1.2	1.6	0.4

*Posttest minus pretest.

APPENDIX B

Passing Rates in Native Language Arts Courses

School	FALL		SPRING		TOTAL
	Number of Students	Percent Passing	Number of Students	Percent Passing	Overall Passing Rate
Newtown	241*	84	246**	84	84
John Bowne	190***	74	181***	88	81
Francis Lewis	0	0	9	100	100

*Data were missing for 58 students.
**Data were missing for 53 students.
***Data were missing for 34 students.

APPENDIX C

Passing Rates in Content-Area Courses
at Newtown

	FALL		SPRING		TOTAL
	Number of Students	Percent Passing	Number of Students	Percent Passing	Overall Passing Rate
Math	195	68	197	57	62
Science	212	77	204	77	77
Social Studies	195	79	159	82	80

- The program objective of a passing rate of 70 percent or higher was achieved in science and social studies both semesters, but it was not achieved in math.

APPENDIX C (continued)

Passing Rates for Content-Area Courses
at John Bowne

	FALL		SPRING		TOTAL
	Number of Students	Percent Passing	Number of Students	Percent Passing	Overall Passing Rate
Math	190	60	183	73	66
Science	173	79	160	90	84
Social Studies	193	90	181	82	86

- The program objective of a passing rate of 70 percent or higher was achieved in science and social studies both semesters, but it was achieved in math only in the spring.

APPENDIX D

BOARD OF EDUCATION · CITY OF NEW YORK
NEWTOWN HIGH SCHOOL
48-01 NINETIETH STREET
ELMHURST, N. Y. 11373 · (Area Code 212) 592-0883

MARGARET T. PAN-LOO, Ph. D.
"O.C.J.L.A." Program Director

March 5, 1986

Parent's Training Program at
Newtown High School

Agenda

1. E.S.E.A. Title VII Program Project BEACON progress report
2. Parent Advisory Committee Comments on the program
3. Parents citizenship ESL classes
4. Testing and Evaluation
5. Cultural Activities

-- Refreshements Served --

第八屆全市中國學生家長大會

THE EIGHTH ANNUAL
CITY-WIDE CHINESE PARENTS' CONFERENCE

DATE:	SUNDAY, APRIL 20, 1986	日期：一九八六年四月二十日（星期日）
TIME:	9:30 a.m. — 4:30 p.m.	時間：上午九時三十分至下午四時三十分
PLACE:	P.S. 124 Manhattan 40 Division Street New York, N.Y. 10002	地點：第一二四小學禮堂（寶岡小學） 地段區新四十號（孔子大厦）

MAJOR WORKSHOP TOPICS:	討論事項：
ORIENTATION FOR PARENTS	家長對學校應有的認識
BILINGUAL EDUCATION PROGRAMS	中英雙語教育
PARENTAL INVOLVEMENT	家長如何參與子女的教育過程
EDUCATIONAL PROGRAMS: NYC PUBLIC AND PRIVATE SCHOOLS	紐約市公立與私立學校的教育課程
COMMUNITY SERVICES	各種社區服務
SAFEGUARDING OUR CHILDREN	有關子女安全問題
CAREER OPPORTUNITIES	各種職業機會

COMPLIMENTARY MORNING TEA & PASTRIES	免費早午餐
COMPLIMENTARY LUNCH	
ACHIEVEMENT AWARDS	頒發優異獎
DOOR PRIZES	抽獎（出席者均有機會得獎）
PERFORMANCES	音樂舞蹈表演

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Lower East Side Preparatory School	下東城高中
Newtown High School — Project BEACON	新城高中
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